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APPLICATION NO.	F.	ILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO
10/004,495	10/23/2001		Junwei Bao	509982001600	9364
20872	7590	03/10/2004		EXA	MINER
MORRISON & FOERSTER LLP 425 MARKET STREET				ROSENBERG	ER, RICHARD A
		CO, CA 94105-2482		ART UNIT	PAPER NUMBER
				2877	

DATE MAILED: 03/10/2004

Please find below and/or attached an Office communication concerning this application or proceeding.

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## Office Action Summary

Application No. Applican 10/004,495 **BAO ET** Art Unit Examiner 2877 Richard A Rosenberger

-- The MAILING DATE of this communication appears on the cover sheet with the correspond Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.  - Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.  - If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.  - If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.  - Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).  - Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).  Status						
1) Responsive to communication(s) filed on						
2a) This action is <b>FINAL</b> . 2b) This action is non-final.						
3) Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under <i>Ex parte Quayle</i> , 1935 C.D. 11, 453 O.G. 213.						
Disposition of Claims						
4) Claim(s) 1-51 is/are pending in the application.						
4a) Of the above claim(s) is/are withdrawn from consideration.						
5) Claim(s) is/are allowed.						
6) Claim(s) <u>1-51</u> is/are rejected.						
7) Claim(s) is/are objected to.						
8) Claim(s) are subject to restriction and/or election requirement.						
Application Papers						
9) The specification is objected to by the Examiner.						
10) ☐ The drawing(s) filed on is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.						
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).						
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).						
11) The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.						
Priority under 35 U.S.C. §§ 119 and 120						
<ul> <li>12) Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).</li> <li>a) All b) Some * c) None of:</li> <li>1. Certified copies of the priority documents have been received.</li> <li>2. Certified copies of the priority documents have been received in Application No.</li> <li>3. Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).</li> <li>* See the attached detailed Office action for a list of the certified copies not received.</li> <li>13) Acknowledgment is made of a claim for domestic priority under 35 U.S.C. § 119(e) (to a provisional application) since a specific reference was included in the first sentence of the specification or in an Application Data Sheet.</li> <li>37 CFR 1.78.</li> <li>a) The translation of the foreign language provisional application has been received.</li> <li>14) Acknowledgment is made of a claim for domestic priority under 35 U.S.C. §§ 120 and/or 121 since a specific reference was included in the first sentence of the specification or in an Application Data Sheet. 37 CFR 1.78.</li> </ul>						
Attachment(s)  1) Notice of References Cited (PTO-892) 2) Notice of Draftsperson's Patent Drawing Review (PTO-948) 3) Information Disclosure Statement(s) (PTO-1449) Paper No(s)						

Application/Control Number: 10/004,495

Art Unit: 2877

1. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

- (a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negatived by the manner in which the invention was made.
- 2. Claims 1-51 are rejected under 35 U.S.C. 103(a) as being unpatentable over the acknowledged prior art of the instant specification.

The instant specification disclosed that it is known to use multiple points to determines an integrated response across an aperture within an optical system form light scattering object; see paragraphs [0004] and [0005] on pages 2 and 3. If multiple points are being used, clearly there must be a first point and a second point among them; the independent claims only require that there be two points, they do not require that their be no more than two. It is clear that any such simulation must be based in part on both the points used and the characteristics of the lens system. Those in the art could use appropriate simulation algorithms and mathematical models to model the responses for various desired objects, including two-dimensional gratings. It is known and would have been obvious to use appropriate means to obtain the necessary numbers for the model and to do the calculations, and appropriate software to control the control and calculation means.

Application/Control Number: 10/004,495 Page 3

Art Unit: 2877

It is also known to use a single point (see the instant specification, paragraph [0006] on page 3), and it is known that this produces less accurate results (see paragraph [0007] on pages 3 and 4) than using multiple points. It would have been obvious to use as many points as needed for the desired accuracy while reducing the computational load and thus the time it takes to do the calculations; this is a simple engineering tradeoff of time versus accuracy. When only two points are good enough for the application at hand even though one is not accurate enough, it would have been obvious to use only two because the calculation load would be minimum for the acceptable results.

- 3. Finarov et al (US 6,292,265) and Stirton (US 6,614,540) show system using such simulation.
- 4. Papers related to this application may be submitted to Group 2800 by facsimile transmission. The faxing of such papers must conform to the notice published in the Official Gazette, 1096 OG 30 (15 November 1989). The fax number is (703) 872-9306

Any inquiry concerning this communication or earlier communications from the examiner should be directed to R. A. Rosenberger whose telephone number is (703) 308-4804.

Any inquiry of a general nature or relating to the status of this application should be directed to the Group receptionist whose telephone number is (703) 308-0956.

R. A. Rosenberger 26 February 2004

Richard A. Røsenberger Primary Examiner